

[CMOS TRANSISTOR AND CMOS-BASED DEVICE]

Abstract

A CMOS transistor is described. The CMOS transistor comprises a first TFT of a first conductivity type and a second TFT of a second conductivity type. The first TFT includes a gate, a channel region, a first doped region of the first conductivity type and a source region, wherein the channel region, the first doped region and the source region are arranged along a first direction. The second TFT includes a gate, a channel region, a second doped region of the second conductivity type and a drain region, wherein the channel region, the second doped region and the drain region are arranged along the first direction. The first and the second doped regions are arranged along a second direction that is perpendicular to the first direction, and are electrically connected by a conductive line extending along the second direction.